

What is claimed is:

1. A CDMA receiver performing a path search by searching with a prescribed timing a delay profile indicating a signal power distribution with respect to delay times of received signals, wherein said delay profile is divided into a plurality of regions, based on said delay time, said searching done at the respective timing being performed so as to determine a power distribution condition for at least one selected region, said regions being selected for the purpose of searching each one of the respective regions with a different frequency from each other, based on said power distribution of said regions.

2. A CDMA receiver according to claim 1, wherein said searching searches for a peak power within said each one of said regions, and wherein a region is selected so that the higher peak power a region possessing, with the higher frequency can be selected.

3. A CDMA receiver according to claim 2, wherein a peak power used in setting said selection frequency of said regions is a total of a plurality of peak powers within said region.

4. A CDMA receiver according to claim 1, wherein said searching is performed with regard to one region at each one of said respective timings, so as to form at least one cycle in which searching is performed for all regions, with a prescribed number of timings, and wherein a selection frequency of the respective regions is represented as a difference in the number of searchings

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for each one of the regions and performed within one cycle.

5 5. A CDMA receiver according to claim 1, wherein each one of said regions comprises time periods that are either equal to or different from each other.

6. A CDMA receiver according to claim 5, wherein there exists an overlapped time period in each of said region with respect to the neighboring region thereto.

10 7. A CDMA receiver according to claim 2, wherein said regions are classified into important regions, which are regions including a relatively large peak power, and non-important regions, which are other regions, and wherein a selection frequency of said important region is made high, and a selection frequency of said non-
15 important regions is made low.

20 8. A CDMA receiver according to claim 7, wherein control is performed so that, in a case in which said peak power used in classification into said important regions and said non-important regions, when path
25 information corresponding to one peak power within a region is assigned to a finger, a region including said one peak power is included in said important regions, and when path information corresponding to one peak power within a region is not assigned to a finger, a region
including said one peak power is removed from said important regions.

9. A CDMA receiver according to claim 3, wherein a respective multiplier is applied to each one of the detected peak powers in all respective regions in order

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that the higher peak power a region among all of the regions possessing, the larger multiplier is assigned, and a total of said peak powers in each of said regions is determined.

5 10. A CDMA receiver according to claim 3, wherein a total of said peak power in each of said region is taken as an average of one or more the respective peak powers obtained by one or more searching for each one of said regions.

10 11. A CDMA receiver according to claim 3, wherein weighting is performed so as to weight a region greater, the higher is a selection frequency of said region, in taking a peak power total.

15 12. A CDMA receiver performing a path search by searching with a prescribed timing a delay profile indicating a signal power distribution with respect to delay times of received signals, comprising:

20 a separating means, which divides said delay profile into a plurality of regions, based on said delay time, and which separates at least one of said selected region of said delay profile at the respective timings;

a detection means, which performs detection within said separated region, and determines a power distribution condition;

25 a priority establishing means, which establishes a priority of a region in response to said power distribution condition; and

a region designation means, which designates a region to be selected as an object to be separated in

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said separating means so that the higher priority a region possessing, with the higher frequency can be selected.

13. A method for path searching whereby a path is
5 detected by searching at a prescribed timing for a delay profile indicating a signal power distribution with respect to a delay time of received signal, said method comprising:

dividing said delay profile into a plurality of regions, based on said delay time, and separating at
10 least one said selected region of said delay profile at each one of said timings;

searching within said separated region and determining a power distribution condition; and

15 establishing priority of a region in response to said power distribution condition and, designating one region to be selected as an object to be separated in said separating means so that the higher priority a region possessing, with the higher frequency can be
20 selected.

14. A path search method according to claim 13, whereby a peak power within said region is determined by said detection, and whereby said region is set to at a priority so that the higher peak power a region
25 possessing, at the higher priority can be set.

15. A path search method according to claim 14, whereby said priority is calculated based on a peak power obtained at each one of said timings, and whereby said region frequency is calculated based on said priority

calculated at each one of said timings, and further whereby calculation of said priority and frequency is performed by a prescribed algorithm.

16. A program for implementing on a computer:

5 a function to perform a pass search carried out in a CDMA receiver with a prescribed timing, by determining a power distribution for at least one region out of a plurality of divided regions of a delay profile representing a signal power distribution with respect to delay time of a received signal in said CDMA receiver; and

a function of performing selection of a region for a searching same with a frequency differing for each region, in response to said region's power distribution condition.

10 17. A program for causing a computer to function as:

15 a separating means, which separates at least one region out of a plurality of divided regions of said delay profile which representing a signal power distribution with respect to the delayed time of said receiving signals in a CDMA receiver, at a prescribed timing; and

a detection means, which performs detection within said separated region, and determines a power distribution condition;

20 25 a priority establishing means, which establishes a priority of a region in response to said power distribution condition; and

a region designation means, which make a designation for a region to be selected as an object to be separated

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in said separating means so that the higher priority a region possessing, with the higher frequency can be selected.

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